On the peculiar variations of two southern B[e] stars

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In this work, we present the peculiar variations shown by two B[e] stars, namely the SMC supergiant LHA115-S23 and the galactic unclassified object HD50138, mainly based on high resolution optical spectroscopic data. The spectra of LHA115-S23 revealed the disappearance of photospheric HeI absorption lines in a period of only 11 years. Due to this, the star has changed its MK classification from B8I to A1Ib, becoming the first A[e] star identified. Concerning HD50138, the brightest known B[e] star, based on our data, taken with a difference of 8 years, it is possible to see the presence of strong spectral variations, probably associated to a new outburst, which took place prior 2007. A detailed spectroscopic description, the projected rotational velocities, the modeling of their spectral energy distributions, and the discussion about the possible nature and circumstellar scenarios for these two curious B[e] stars are provided.